Appendix J6

Major Equipment List

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1.0 Introduction

The following equipment descriptions are based on conceptual design and are representative of the proposed scope.

2.0 Combustion Turbine Generator (CTG)

Quantity	Capacity	Description
2	100%	General Electric Model PG7121(EA) combustion (gas) turbine generator, suitable for firing natural gas, nominally rated at 83.2 MW at ISO conditions. There will be no steam injection. A dry low NO_x combustor is used to control NO_x.
2	100%	Evaporative cooler.
2	100%	General Electric Model 87A6 Packaged Air Cooled Generator.
2	100%	Compressor water wash system (on/off-line).
2	100%	Acoustical enclosure.
2	100%	CO_2 or FM-200 fire protection system.

3.0 Compressed Air System

Quantity	Capacity	Description
2	100%	Air compressors - air-cooled.
1	100%	Air receiver tank.
2	100%	Air dryers.

4.0 Water Treatment System

Quantity	Capacity	Description
1	100%	Fire/service water storage tank - 200,000 gal.
2	100%	Oil/water separators with duplex pumps.
1	100%	RO System.
1	100%	RO product tank - 10,000 gal.
2	100%	RO product tank pumps.

Quantity	Capacity	Description
2	100%	Raw water pumps.
1	100%	Wastewater filter package.
1	100%	Wastewater RO package.

5.0 Fuel System

Quantity	Capacity	Description
1	100%	Metering station.
2	100%	Fuel gas scrubber/filter.

6.0 Fire Pumps

Quantity	Capacity	Description
2	100%	2,500 gpm electric motor-driven fire pumps.
1	100%	Electric motor-driven jockey pump (pressure maintenance).

7.0 Electrical Equipment

Quantity	Capacity	Description
2	100%	CT generator step-up transformer (Later) MVA, OA/FA/FA, 230 kV - 13.8 kV.
2	100%	Unit auxiliary transformer (Later) MVA, OA/FA, 13.8 kV - 480 V.
2	100%	CT generator circuit breaker, 5,000 amp, 1,500 MVA at 40° C, rated for operation on a 13.8 kV system.
2	100%	Electrical equipment including 480 V secondary unit substations and MCCs.
1	3-phase 460 V 250 kW	Emergency generator.

8.0 Emission Control Equipment

Quantity	Capacity	Description
2	100%	SCR System for NO_x control.
2	100%	Catalyst for CO control.
2	100%	Blowers for air dilution of CTG gases. 375 kW motors 105,500 acfm, static pressure 17.85 in. wc.
2		Aqueous ammonia injection skid.
1	9,000 gallons	Aqueous ammonia storage tank.
2	17' dia., 100' tall	CTG stack.
1	8,000 gallon	Sub surface ammonia spill collection tank

9.0 Size (Approximate) of Major Equipment

Quantity	Description	Length (ft)	Width (ft)	Height (ft)
2	Combustion gas turbine with cranking motor package	50	45	20
2	CT air inlet filter with air cooling	57	20	57
2	CT generator with enclosure	40	20	25
2	Fuel gas filter separator	10	10	40
2	CTG stack	--	17.0 dia	100
2	Aqueous ammonia vaporizer skid (SCR)	20	15	10
2	CT generator breakers	20	15	15
2	Auxiliary transformer	15	10	20
2	Step-up transformer	35	20	25
2	Double-ended secondary unit substation/ transformer	28	20	15
1	Fire/service water storage tank (200,000 gallons)	--	30 dia	38
1	Aqueous ammonia storage tank (9,000 gallons)	--	30 dia	16
1	Administration/maintenance building	100	50	25
1	Fire pump structure	30	15	12
1	Electrical switchgear structure	36	12	15

Quantity	Description	Length (ft)	Width (ft)	Height (ft)
1	Emergency generator structure	14	12	--
1	Sub surface ammonis spill collection tank (8,000 gallons)	17	9 dia	--